

1021-51-187

**Matt Bainbridge\*** ([mcb@math.uchicago.edu](mailto:mcb@math.uchicago.edu)), Department of Mathematics, University of Chicago, 5734 S. University Avenue, Chicago, IL 60637. *Siegel-Veech constants for billiards in genus two.*

There is a well-known action of  $\mathrm{SL}_2\mathbb{R}$  on the moduli space  $\Omega_1\mathcal{M}_g$  of genus  $g$  Riemann surfaces equipped with a unit area Abelian differential. Associated to any ergodic, invariant measure are certain constants called Siegel-Veech constants, which record information about asymptotics of certain counting problems. I will discuss the calculation of these constants for most ergodic measures on  $\Omega_1\mathcal{M}_2$ . (Received September 05, 2006)